

Claims

1. Homogeneous assay method of quantitative measurement of kinase, phosphatase and phosphodiesterase (PDE) reactions, characterized in that the  
5 kinase, phosphatase or phosphodiesterase is allowed to react with a fluorescent, phosphorylatable or dephosphorylatable substrate in the presence of a polycationic polymer containing quencher groups and the change in phosphorylation is determined by way of the change in fluorescence.
- 10 2. Assay method according to Claim 1, in which the polycationic polymer is polyethylenimine, polyarginine, polylysine and/or polyhistidine.
3. Assay method according to Claim 1, in which the quencher is Dabcyl, QSY35 or another dye suitable for energy transfer, which itself is non-fluorescent.  
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4. Assay method according to Claim 1, in which the fluorescent label is fluorescein, EDANS, rhodamine, Cy5, EvoBlue dyes, coumarins and/or Alexa dyes.
- 20 5. Assay method according to any of Claims 1 to 4, in which the measurement is carried out kinetically.
6. Assay method according to any of Claims 1 to 4, in which the measurement is carried out in parallel/simultaneously in a microtitre plate.
- 25 7. Assay method according to any of Claims 1 to 6, in which the change in fluorescence is either the change in fluorescence intensity or the change in fluorescence lifetime.
- 30 8. Assay method according to any of Claims 1 to 7, in which the measurement is used for discovering active compounds which influence the kinase,

phosphatase or phosphodiesterase reaction investigated.